Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Promoting Telehealth for	)	WC Docket 18-213
Low-Income Consumers	)	

COMMENTS OF HUGHES NETWORK SYSTEMS, LLC

I. INTRODUCTION

Hughes Network Systems, LLC ("Hughes") supports the Federal Communications Commission's ("Commission") efforts to develop a Connected Care Pilot Program ("Pilot Program") utilizing Universal Service Fund ("USF" or "Fund") resources to test methods for developing telehealth services in underserved areas that would bring high-quality healthcare directly to patients' homes through broadband connectivity. The Commission has previously used USF programs to support programs that connect healthcare providers to each other and the Internet.[1] This Pilot Program, however, is intended to expand a new trend in solving healthcare needs—connected care. Hughes fully supports the development of connected care, which focuses on the delivery of high-tech, high-quality healthcare by means of a broadband connection directly to the patient, regardless of where they are located.[2]

Hughes submits these comments in response to the Commission's notice of proposed rulemaking on the creation of a 3-year, cost-effective Connected Care Pilot Program to bring broadband-enabled healthcare to low-income Americans and veterans, many of whom live in rural areas that are hard to

[1] *Promoting Telehealth for Low-Income Consumers*, Notice of Proposed Rule Making, FCC 18-112 (2019) ("Telehealth NPRM"), paragraph 7.
[2] *Id*.

access.[3] The data gathered through the Pilot Program will help the Commission understand how to use the Fund to better promote quality healthcare through the adoption of connected care services.[4]

As the FCC recognizes, expanding telehealth technologies could save the American healthcare system (which currently costs the United States more than $3 trillion every year[5]) $305 billion annually by improving patient health outcomes and decreasing hospital visits.[6] However, there are key obstacles preventing the widespread development of telehealth services, including the lack of broadband access and the cost for residents to access existing broadband services.[7] This Pilot Program seeks to make connected care services more accessible to low-income Americans by defraying costs associated with receiving services, such as broadband connection expenses. The results of the Pilot Program will assist the FCC in better understanding the Fund's future role in helping medically underserved populations use broadband-enabled telehealth services.[8]

Hughes supports the Pilot Program and the goal of the FCC in using this program. As discussed herein, Hughes supports the FCC's inclusion of all technologies for consideration in the Pilot Program. Additionally, to ensure the most successful Pilot Program, Hughes urges the FCC to:

- Include funding for end user devices;
- Refrain from requiring that grant recipients be Eligible Telecommunications Carriers ("ETCs");

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[3] Telehealth NPRM, paragraphs 14-16.
[4] Telehealth NPRM, paragraph 4.
[5] Telehealth NPRM, paragraph 11, citing *NHE Fact Sheet* (April 17, 2018), Centers for Medicare and Medicaid Services, https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html.
[6] Telehealth NPRM, paragraph 11, citing *The Digital Revolution Comes to US Healthcare*, paragraphs 12–13, Goldman Sachs, *Internet of Things*, Vol. 5, (2015), https://www.wur.nl/upload_mm/0/f/3/8fe8684c-2a84-4965-9dce-550584aae48c_Internet%20of%20Things%205%20-%20Digital%20Revolution%20Comes%20to%20US%20Healtcare.pdf.
[7] See e.g.. Lack of Access to Broadband Hampering Access to Healthcare for Veterans (May 2, 2019) *available at* https://www.healthdatamanagement.com/news/lack-of-access-to-broadband-hampering-telehealth-for-veterans; and Lack of Broadband Access Limits Telemedicine in Rural Communities (May 22, 2019) *available at* https://www.beckershospitalreview.com/telehealth/lack-of-broadband-access-limits-telemedicine-in-rural-communities-study-finds.html.
[8] Telehealth NPRM, paragraph 1.

- Focus funding efforts on connecting patients to broadband, rather than on broadband buildout; and
- Prefer candidates who have multiple technologies (i.e., wireless, wireline, or satellite) by awarding them more points during the selection process.

II. BACKGROUND

Hughes is the largest provider of satellite broadband services in the United States and around the world, with more than 1.4 million subscribers across North and South America. Hughes operates three Geostationary Orbit ("GSO") Ka-band satellite networks over the US to provide ubiquitous broadband coverage of the contiguous US, southeastern Alaska, Puerto Rico, and the US Virgin Islands at FCC-defined speeds of 25/3 Mbps and above. Hughes is currently in the process of constructing EchoStar XXIV, a next-generation, Commission-licensed, ultra high-density satellite, which will provide service throughout the Americas at speeds of 100 Mbps or more.[9] EchoStar XXIV is expected to launch and begin commercial service in 2021.[10]

Additionally, Hughes has worked with health systems and consumer telehealth service providers to design care delivery models via satellite to their consumer base. While these models are still in development, they have provided Hughes with significant background knowledge on the technical, clinical, and financial challenges that present themselves in the current American healthcare system. Accordingly, Hughes is well positioned to participate in this Pilot Program and bring the benefits of healthcare to low-income patients across the country.

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[9] Press release, *Hughes Selects Space Systems Loral to Build Next-Generation Ultra High Density Satellite,* Hughes, (August 9, 2017), https://www.echostar.com/Press/Newsandmedia/Hughes%20Selects%20Space%20Systems%20Loral%20To%20Build%20Next-Generation%20Ultra%20High%20Density%20Satellite.aspx.

[10] *Id*.

III. DISCUSSION

A. THE PILOT PROGRAM MUST BE STRUCTURED TO ENABLE THE FCC TO OBTAIN THE BEST DATA TO SUPPORT FUTURE TELEHEALTH FUNDING EFFORTS

Overall, Hughes supports the FCC's proposed structure for the Pilot Program. If the program is structured correctly, the $100 million budget with a 3-year funding program, with 20 funded projects, will enable the FCC to have sufficient time and data. Accordingly, Hughes urges the FCC to ensure that the funding is focused first toward broadband adoption. Specifically, Hughes urges the FCC to allow the Pilot Program funding to go toward broadband end user devices and not only connectivity. Satellite technologies, like Hughes', already have their networks deployed to bring connectivity to patients. Instead of having to rely on last-mile facilities, as with wireline carriers, satellite users only need to have access to a VSAT terminal. Being able to use Pilot Program funding to buy down the cost of the device, installation, and service will ensure that the Commission develops a cost-effective, technology-neutral Pilot Program.

Additionally, the Commission should ensure that all technologies are tested in its Pilot Program so the potential of each for telemedicine delivery can be evaluated. Hughes recommends that the FCC require the Pilot Program to include at least one pilot project for each broadband technology that applies (e.g., fiber, terrestrial mobile wireless, satellite). Such an approach will enable the FCC to gather data on the performance of all technologies toward a more robust understanding of the technical requirements for telehealth in order to deploy its resources for a larger-scale, technology-neutral telehealth funding initiative if each technology is tested.

B. THE PILOT PROGRAM SHOULD NOT REQUIRE ETC STATUS FOR PARTICIPATION

We support the FCC's proposal not to limit Pilot Program participation to ETCs with the goal to incentivize a diverse range of healthcare providers and service providers, including non-ETCs.[11] This approach will have a positive effect on the Pilot Program's success. As the FCC is aware, gaining ETC status can be a time-consuming and burdensome process—just to receive ETC status from a state can take months. Additionally, ETC requirements are often burdensome themselves, leading to increased costs for the service provider. Accordingly, the regulatory burdens of gaining and keeping ETC status could discourage participation and decrease Pilot Program effectiveness, and because of the short-term nature of the pilots, would be unnecessary.

C. THE COMMISSION SHOULD PRIORITIZE PILOT PROJECTS THAT PLAN TO ENABLE PATIENT CONNECTIVITY TO EXISTING BROADBAND FOR TELEMEDICINE

The Pilot Program is designed to fill gaps in healthcare for low-income, rural, and veteran patients by enabling access to telemedicine via adequate broadband.[12] Therefore, the Pilot funds should be directed to rural patients, rather than rural healthcare providers. While rural healthcare providers have access to rural patents, there is a greater dividend to be achieved in also connecting rural patients to non-rural providers. For that, the weakest link remains broadband access at the rural patient's home. Rural healthcare providers have access to alternative funding to support broadband access needs. Provisions should be made to prioritize rural healthcare providers that provide a link between rural patients and non-rural expertise. Therefore, the scope of this Pilot Program should be narrowed to ensure that selected pilot projects are focused on developing patient access to broadband and telemedicine services that connect patients with providers and specialists who would be otherwise unreachable.[13]

[11] Telehealth NPRM, paragraphs 46-48.
[12] Telehealth NPRM, paragraphs 2 and 7.
[13] Telehealth NPRM, paragraph 6, citing *Rural Health Care Support Mechanism*, Report and Order, 27 FCC Rcd 16678, 16686, paragraph 19 (2012) (Healthcare Connect Fund Order).

D. THE PILOT PROGRAM SELECTION PROCESS SHOULD REWARD MULTI-TECHNOLOGY SOLUTIONS

The Commission has proposed a number of factors it will consider when selecting which applications to fund. The Commission should consider adding a criterion that awards additional points to applicants who propose the use of multiple broadband access technologies (e.g., terrestrial and satellite). As the communications network evolves toward 5G, it is apparent that no single technology will be sufficient to provide all the services that are required. This is especially true for rural healthcare, whereby a range of technologies have varying ranges of coverage. There is no single solution that will close the digital divide; rather, all technologies should be used to their strengths in delivering telemedicine to underserved patients.

IV. CONCLUSION

Hughes supports the Commission's efforts to extend telemedicine to underserved patients throughout the United States. By making a few modifications to the structure of the program to encourage broadband adoption as quickly as possible by prioritizing broadband adoption rather than buildout, funding end user devices, not requiring ETC status, and ensuring technology neutrality, the Commission can ensure that the Pilot Program yields valuable understanding of the connectivity needs for future telemedicine efforts.

Respectfully submitted,

/s/

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August 29, 2019